Record Nr. UNINA9910829006503321 **Titolo** Sea-level rise for the coasts of California, Oregon, and Washington: past, present, and future / / Committee on Sea Level Rise in California. Oregon, and Washington, Board on Earth Sciences and Resources and Ocean Studies Board, Division on Earth and Life Studies, National Research Council of the National Academies Pubbl/distr/stampa Washington, District of Columbia:,: The National Academies Press,, [2012] ©2012 **ISBN** 0-309-25597-X 0-309-25595-3 Descrizione fisica 1 online resource (215 p.) Soggetti Sea level - California Climatic changes - California Coast changes - California Sea level - Oregon Climatic changes - Oregon Coast changes - Oregon Sea level - Washington Climatic changes - Washington Coast changes - Washington Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Front Matter; Preface; Acknowledgments; Contents; Summary; 1 Nota di contenuto Introduction: 2 Measured Global Sea-Level Rise: 3 Contributions to Global Sea-Level Rise; 4 Sea-Level Variability and Change off the California, Oregon, and Washington Coasts; 5 Projections of Sea-Level Change; 6 Responses of the Natural Shoreline to Sea-Level Rise; References; Appendix A: Vertical Land Motion and Sea-Level Data

**Fingerprint Effects** 

Along the West Coast of the United States; Appendix B: Sea-Level Rise in the Northeast Pacific Ocean; Appendix C: Analysis of Sea-Level

Appendix D: Long-Term Tide Gage Stability From Leveling Data Appendix E: Cryosphere Extrapolations; Appendix F: Biographical Sketches of Committee Members; Appendix G: Acronyms and Abbreviations

## Sommario/riassunto

"Tide gages show that global sea level has risen about 7 inches during the 20th century, and recent satellite data show that the rate of sealevel rise is accelerating. As Earth warms, sea levels are rising mainly because ocean water expands as it warms; and water from melting glaciers and ice sheets is flowing into the ocean. Sea-level rise poses enormous risks to the valuable infrastructure, development, and wetlands that line much of the 1,600 mile shoreline of California, Oregon, and Washington. As those states seek to incorporate projections of sea-level rise into coastal planning, they asked the National Research Council to make independent projections of sea-level rise along their coasts for the years 2030, 2050, and 2100, taking into account regional factors that affect sea level."--Publisher's description.